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ABSTRACT

The objectives, program, participants, and evaluation of The Administration of Instructional Change (TAIC) Institute are described in this report. The training program was designed to help teams of local leadership personnel to design strategies using media to cope with problems that blocked change, as well as to facilitate change by integrating media more fully in the curriculum. The sections of the report include: 1) short- and long-range goals of the Institute program; 2) planning activities; 3) selection of participants; 4) day-to-day program activities; and 5) evaluation of district and participant attitudes. A synopsis of each TAIC team project is given. (CH)

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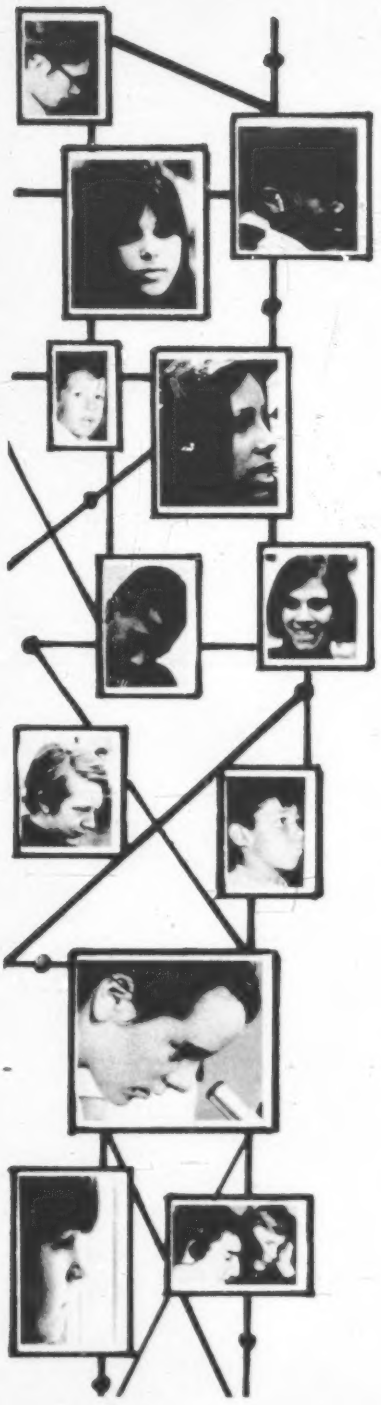

THE ADMINISTRATION OF INSTRUCTIONAL CHANGE

JACK TANZMAN, Director

Institute offered by:

Board of Cooperative Educational Services, Nassau
Division of Educational Communications,
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Bureau of Educational Personnel Development,
United States Office of Education
For Local School Districts

under the Education Professions Development Act

Board of Cooperative Educational Services
125 Jericho Turnpike Jericho, New York 11753

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An 18-month EPDA Institute
1970-1971

THE ADMINISTRATION OF INSTRUCTIONAL CHANGE

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Dr. William T. Callahan, District Superintendent

INTRODUCTION

An institute so far-reaching in its effects on schools as THE ADMINISTRATION OF INSTRUCTIONAL CHANGE (TAIC) '70 has been, would not have been possible without the hard work and dedication of many people with many skills--a real team effort. For their work, I want to thank and commend TAIC's co-director, Edward Foster, for his day-to-day work with the teams and guest speakers, and our BOCES staff, who gave TAIC a high priority in their work schedules in the following areas:

Edward Cohen	- research, PERT, learning sequences, evaluation
Mary Flynn	- research, behavioral objectives, simulations, evaluation
Dalton Levy	- videotaping
Paul Neff	- television planning, programming and utilization
Claire Rudin	- library-media services
Arlene Soifer	- proposal development, pre-institute coordination, TAIC dissemination
Larry Sribnick	- instructional media

and also to Carin Chapman, field evaluator, who has worked directly with the teams in their local districts from September to June. Lillian Herman provided excellent secretarial services to the project. Last but not least, thanks to the entire BOCES central office staff, who graciously accomodated our 74 daily guests during last summer.

TAIC was the second EPDA Institute BOCES has been awarded. The first, called TAP '69 (Team Approach Project), trained 15 teams of three--a teacher, a librarian and a teacher aide--in the creation of media for classroom use. For 1971, and running through June, 1972, BOCES was awarded a third but a different kind of instructional

development institute by EPDA. Resource Educators for Directed Development of Instruction (REDDI) will train a selected group of leadership people from Nassau County school districts in developing curricula that employ media and instructional technology through a consortium of school districts, BOCES and universities.

In our R & D role as planning facilitators and agents for educational change, we look forward to continued service to the Nassau County educational community.

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JUSTIFICATION

The Administration of Instructional Change (TAIC) Institute emerged from conferences between the Nassau Board of Cooperative Educational Services (BOCES) and administrators representing the 56 districts in the County, who identified the need to effect district-wide changes in education by integrating media more fully into the curriculum. They requested that teams of local leadership personnel receive training which would help them to design strategies using media to cope with problems that blocked change, as well as to facilitate change by integrating media more fully into the curriculum. TAIC was, therefore, designed to provide districts with key personnel who would implement a systems approach to education through media. The program was developed so that innovation and change would spread within a comparatively short period of time throughout the district, as well as integrate and unify each district's media program.

Teams were composed of an Assistant Superintendent or Building Principal, a Librarian, a Media Specialist, and a Master Teacher. These leadership personnel were given intensive training in systematic problem-solving techniques as they specifically related to media. An integral part of BOCES' plan was that this cadre of professionals would design and implement in-service courses for a nucleus of their colleagues, who in turn would serve as trainers throughout the district.

OBJECTIVES

The goals of the Institute program were, therefore, to train a cadre of district professional teams who could:

1. cope with problems that blocked change;
2. effectuate planned behavior change among their colleagues;
3. unify and expand their media programs.

Prior to establishing the short and long term object ives for TAIC, certain assumptions based on the above were made:

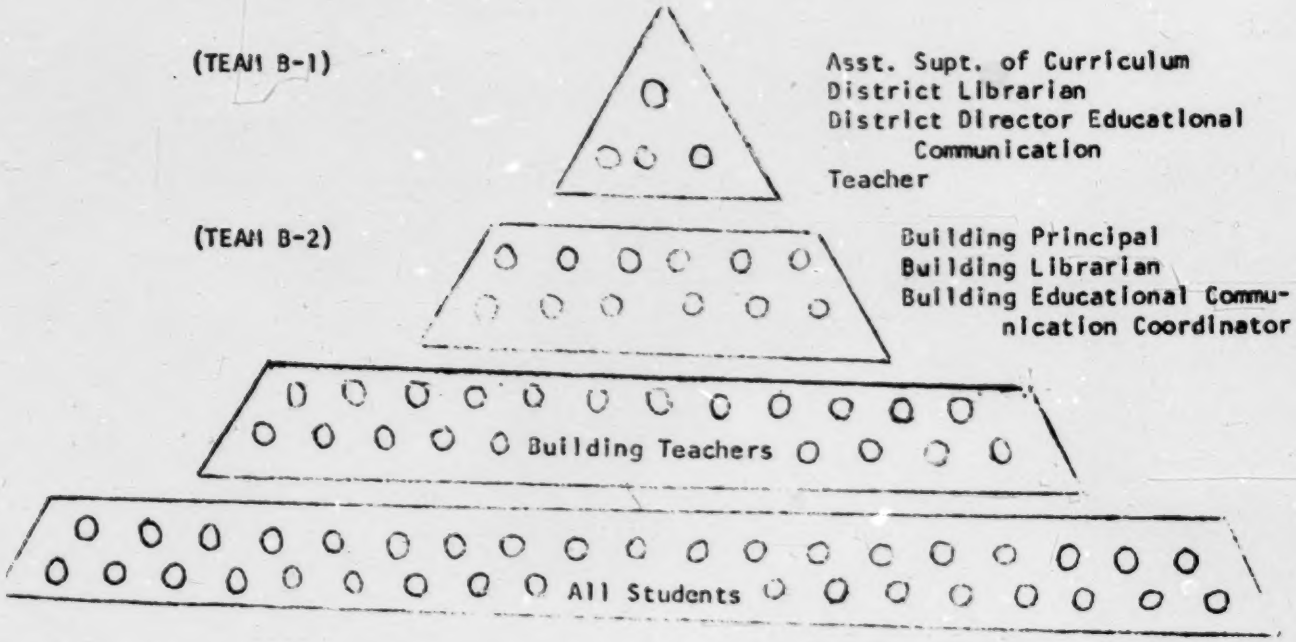
1. The skill of problem solving is best learned in settings which approximate real conditions.
2. Complex school service organizational problems are best handled by the work of a team representing all levels of school operation: administrator, curriculum coordinator, department chairman, librarian, media specialist and teacher.
3. The best instructional development plans are those in which all levels, especially teachers:
    a. share responsibilities for diagnosing and creating;
    b. acquire operational skills in conjunction with developmental activities;
    c. obtain feelings of personal identity and commitment, as a result of their participation; and
    d. determine a system of evaluating results of change efforts.

The multiplier effect can be termed the short-range objective of this proposal.

1. To train a district-wide team (Team B-1), composed of an Assistant Superintendent of Instruction and Curriculum and a district librarian and a district educational communication director to utilize instructional media, and develop district and building media centers;
2. To train this team to conduct in-service courses in their districts for principals, for school librarians, building educational communication coordinators (Team B-2), who in turn would conduct teacher in-service programs in each building creating a multiplier effect on instructional media teams; and

3. To train Team B-1 to utilize auxiliary personnel in media and to assist Team B-2 in their training.

The diagram illustrates the multiplier effect.



In behavioral terms, these objectives were divided into four phases, as follows:

Phase IA (Pre-Institute for Assistant Superintendents related to Short-Range Objective 1)

The primary pre-institute task was the development of statements of relevant behavioral objectives to be sought.

1. To prepare a list of statements that described the media program in participants' districts.
2. To secure each, two additional team members, his district or high school librarian, and the district educational communications director, to participate in the forthcoming institute.
3. To prepare individually and with the selected district people a description of learning problems in his school system, budget problems for hardware, teachers' interests, students' capabilities and

a community profile. Appropriate data to support description was gathered and submitted to institute specialists.

4. A bibliography was given to participants.

Phase IIA (For all team members related to Short-Range Objective 2)

1. To state and list the rules, and the advantages and disadvantages of simulation theory in solving school problems, after field visits by the institute director.
2. To write descriptive and real in-school media implementation problems in the form of a community profile, on which the elements of the training program were based.
3. To prepare a curriculum outline for the training program, defining the role assistant superintendents and other team members would play in training (Phase III) building teams.
4. To translate educational problem cases into a format suitable for problem-solving simulations as a basic institute learning experience.
5. To write behavioral objectives for the training course given in (Phase III).
6. To collect the materials used in the training of building teams (Phase III).
7. To generate preliminary criteria for evaluation of the list of materials for their effectiveness in achieving specific behavioral objectives.
8. To collect detailed data on the problems of media implementation in participating school districts.
9. To lead a group in simulation procedures to solve school problems by stating the problems and alternative solutions to the problems.
10. To write a course of action to help secure a budget allocation to support the implementation of the training program (Phase III) and

the expense of introducing media.

Phase IIB (For educational communication director and district librarian (Team B-1) related to Short-Range Objective 2)

1. To secure and examine the actual materials used in the training program (Phase III).
2. To evaluate the materials selected by demonstrating their use to institute members and volunteers from cooperating institutions.
3. To order the elements of the training program in alternative logical sequence.
4. To evaluate alternative sequences by demonstration with volunteers from cooperating institutions.

Long-range objectives include:

1. To permit the Assistant Superintendent of Instruction and Curriculum to utilize his expanded knowledge to improve students' achievements in the cognitive domain and to improve attitudes, interest and values in the affective domain.
2. District librarians and educational communications directors, using their particular skills, will be taught how to develop an instructional system which links media to behavioral objectives of teachers at the building level, thus involving the former in the learning process of students.
3. To generalize the effectiveness of training teams of teachers.
4. To create cross-fertilization of ideas when teachers from different areas work together.

Procedures will include:

1. Team B-1 will conduct an in-service course for Team B-2 during the academic year of 1970-71, which will devote itself to the preparation of multimedia teaching units.

2. Team B-2 will be prepared to train auxiliary personnel (aided by supplementary training in BOCES Occupational Education Schools and cooperating universities on Long Island) from the local community, in the creation of simple graphics, operation and maintenance of equipment and in the storage and preparation of basic instructional materials.
3. The hoped-for impact on participating districts will be that by training Team B-1 to supply in-service instruction in media technology, individualized teaching approaches utilizing media will be emphasized, and a model of the effectiveness of team approach to instruction can be developed. The institute will establish a mechanism within the districts for other retraining and in-service programs to be conducted at district expense. Staff can thus be deployed more effectively within schools.
4. Teachers in the district will be trained by appropriate personnel from the first (Team B-1) and second teams (Team B-2) of trainers, creating a multiplier effect. The project director will conduct regular field visits to out-of-town participants, and conduct troubleshooting meetings for Nassau districts.

PLANNING

The proposal, submitted November 7, 1969, represented the culmination of extensive planning activities. The Director, Jack Tanzman, met on September 30, October 2 and October 7, 1969, with the R & D Coordinators, representing the 56 school districts in Nassau County, to discuss the implementation and application of the institute for their school system. A meeting was also held with Mrs. Alice Scott, director of the Nassau County Office of Economic Opportunity, and OEO directors from more than

half the poverty areas in Nassau. They advised on and were strongly interested in the proposed program, especially at the point that it reached the building level.

This institute's concept was tied into and based upon the program being developed by the Division of Communications of the New York State Education Department under contract to the State University of New York Division of Communications. Planning a program in this manner, with the bulk of the planning preceding funding, has proven to be the most effective and reliable method for insuring that program objectives are achieved.

PARTICIPANTS

The official announcement concerning TAIC was made on March 15, 1970. A brochure describing the institute, detailing the various important dates and underlining the fundamental aspects of the institute was mailed to all Nassau County school districts and private schools, the BOCES Schools, as well as Puerto Rico Department of Education, The Bureau of Indian Affairs, Los Angeles County Board of Education, Evanston Public Schools, Sarasota Board of Public Instruction, and the Board of Education City of Chicago. (appendix)

From this mailing, 58 school systems requested applications. By our deadline date, 29 team applications had been submitted. District selection was based on those that had a significant disadvantaged population and had already implemented some changes involving media, which provided a sight and sound curriculum for underprivileged students. It was anticipated that the TAIC Institute would accelerate and facilitate further district wide development of media programs. Fourteen public and two from private sectors were chosen from Nassau County. Teams from

other urban disadvantaged areas were invited to participate; thus, one team came from Puerto Rico and two participants were sent by the Bureau of Indian Affairs. One group audited the program, and eight districts were selected as alternates. Each district's team was composed of an administrator team leader: i.e., assistant superintendent, district-wide curriculum coordinator, or principal; a librarian, a media specialist, and a master teacher.

This differed from our initially proposed three-member team, because in reviewing our program we considered it essential to include a master teacher on each team. A group-team concept evolved which called for a four-member team for the first two weeks. Each system sent an administrator who:

1. became familiar with the processes;
2. served as consultant and advisor on district policy for the librarian-media specialist-teacher component of the team;
3. acted as a facilitator in implementing the program during Phase III of the project.

During the last three weeks of the institute, the three-member team prepared the materials and project document conceived by the entire team during its initial training. This three-man team ultimately served as the instructors during Phase II of the project.

Criteria for selection of TAIC teams included:

1. A commitment from both the Board of Education and administration to implement each uniquely designed project during the academic year.
2. Indication of willingness to provide facilities and materials for project.
3. A significant number of disadvantaged pupils in the district.

4. Districts had already implemented some changes and were amenable to further changes in developing the district-wide media programs.
5. The qualifications of the entire team:
   District administrator, librarian, media specialist and teacher-trainer.
6. Teams with the greatest need for training were favored, i.e.,
   1. inadequate use of available resources;
   2. district identification of need which institute could help.
7. The private sector was represented.
8. National representatives were included from Bureau of Indian Affairs and Puerto Rico.

All qualified teams not selected for the Institute were placed on the alternate list. Alternates were informed of the opportunity for them to participate in the EPDA Media Specialist Project at the University of Bridgeport, as well as given the opportunity to audit the TAIC Institute. That is to say, they did not receive a stipend or instructional materials; however, they could attend all institute activities. (appendix)

Staff

The first two weeks of summer instruction at the Institute were handled predominantly by guest lecturers and consultants. They introduced many facets of mediated instruction and the implementation of educational change as well as serving as valuable human resources. Other consultants were brought in specifically to work with individual TAIC teams where other expertise was deemed necessary. They included:

Dr. Joel Burdin, Director, ERIC Clearinghouse on Teaching Education

Mr. Lee Campion, Director of the Division of Educational Communications,

New York State Education Department

Dr. Kenneth Dunn, Superintendent, Chappaqua School District

Mr. Lloyd Ferguson, Director Eastern Operations, Westinghouse Learning Corp.

Dr. Abraham S. Fischler, President, Nova University, Fort Lauderdale, Florida

Miss D. Marie Grieco, Professor, School of Library Science, Columbia University, New York

Mrs. Lore Howard, Chief, Bureau of School Libraries, New York State Education Department

Dr. Ben Wallace, Superintendent, Mineola Public Schools, Mineola, New York

BOCES and TAIC staff gave both formal instruction and continuous assistance to all TAIC teams during the 18 months of program. Staff was always available to answer questions and provide information within the framework of its experience and areas of media and research expertise. Staff included:

Mr. Jack Tanzman, Director, Research & Development Division, BOCES; ESEA Title III Regional Center Nassau; TAIC Institute director

Dr. William T. Callahan, District Superintendent, BOCES Nassau

Mr. Edward Foster, Co-Director TAIC

Miss Carin Chapman, Field Evaluation Specialist for TAIC

Mr. Edward Cohen, Senior Unit Researcher

Miss Mary Flynn, Manager of Research & Redesign

Mr. Ken Hartlage, Superintendent of Technical Support Services

Mr. Fred Lehman, Director A.V., Wantagh School District

Mr. R. Tim Lau, A.V. Specialist

Mr. Dalton Levy, Coordinator of T.V., East Nassau BOCES T.V. Cluster

Mr. Paul Neff, Supervisor of T.V.

Mrs. Claire Rudin, Coordinator of Library Services

Mrs. Arlene Solfer, Staff Assistant

Mr. Larry Sribnick, Coordinator of Instructional Technology

Mrs. Lillian Herman, Secretary

Mr. Edward Foster, Co-Director of TAIC, was the full-time summer staff member; Miss Carin Chapman, Field Evaluation Specialist, was responsible for the implementation and follow-up activities of the TAIC projects in the schools. Mrs. Lillian Herman, secretary, has served as the full-time project secretary for 18 months.

ORIENTATION PROGRAM

An orientation program for all TAIC team members was held on June 3, 1970, for the following purposes:

1. Introduction of key staff members
2. Discussion of Institute objectives
3. Informal discussion of program
4. Identification of special needs as expressed by participants
5. Distribution of some materials bibliography etc.
6. Information was gathered about district media programs, as well as learning, budgeting and curricular problems

Every local team was represented at this meeting. The TAIC orientation meeting provided participants with an overview and perspective of their task and objectives for the summer course of study (for which most districts subsequently granted 6 units of in-service credit). The director outlined what their anticipated product would be, and clarified what their role would be when they returned to their respective districts.

Out of town participants were housed at C.W. Post College in Greenvale 10 minutes from the institute. A car was provided for the participants' convenience.

PROGRAM:

During the first phase of the TAIC Institute, June 29 to July 15, nationally recognized consultants who had worked in the area of innovation and change, stimulated and instructed all team members in the utilization and rationale for systems analysis techniques as an approach to developing behavioral objectives: 1) for each team during the institute; 2) for district-wide training programs; 3) for building-wide in-service programs; and 4) for both students and teachers in the classroom. Similarly, curricular problems were systematically analyzed in regard to: teaching-learning processes and decision-making through behavioral objectives; the importance of media and technology in the school environment, especially for the disadvantaged student; and the use of simulation techniques.

Four member teams participated in this instructional sequence for the first two weeks. It was deemed essential to have an administrator informed in the above areas, as well as acting as a facilitator in the district, while the librarian, media specialist and teacher were considered to have the most impact in working with their colleagues.

During the first week, Dr. Fischler, as the keynote speaker, discussed and worked with participants on Instructional Change as a course of action. Being complacent about innovation without a solid rationale and purpose for change was discouraged while systematically analyzing a situation and designing practical solutions, which provided purposeful direction for change was the intent of the institute. Through his effective presentations and continuous challenge to all participants during the first week, the framework for all continuing activities of the institute was established. The systems approach was applied to preparing and using behavioral objectives to establish instructional change on four levels.

1. Behavioral objectives and alternative courses of action for summer institute participant teams;
2. Behavioral objectives and courses of action for training building teams consisting of building principals, librarians and AV persons;
3. Behavioral objectives and alternative courses of action for building teams that would be training teachers;
4. Curricular behavioral objectives and alternative courses of action for student body who would be trained by teachers.

Initially, discussion topics related to the attributes of systems analysis to the teaching-learning process and decision making. Participants were exposed to: 1) clinical supervision as a means of systematically analyzing instruction; 2) behavioral objectives; 3) the concept of accountability; 4) methods of individualizing instruction; 5) PERT as a vehicle for establishing checkpoints in education; 6) team teaching; and 7) role playing.

Each TAIC team began at this time to:

a) define and specify the behavioral objectives to be achieved so that they could train building teams;
b) develop, examine, and select alternative courses of action to achieve the agreed-upon objectives;
c) develop and examine the criteria to determine how well the behavioral objectives are being met and when they are achieved;
d) develop and examine plans to monitor the effectiveness of the training program for feedback and modification of objectives, and to determine courses of action.

During the second week, speakers discussed innovation and change with the participants.

Dr. Ben Wallace discussed ADMINISTRATION, particularly as it relates to identification of problems and problem-solving at all levels. Roles, expectations, behaviors, and outcomes were examined. (1 day)

Dr. William T. Callahan discussed BASIC RESEARCH TECHNIQUES, including staffing for research, research versus evaluation, and application of research findings. Relevant and current problems of the participants were brought to bear on the topic. (1 day)

Dr. Kenneth J. Dunn conducted SIMULATIONS based on the responses to questionnaires which had been tabulated, categorized and interpreted. Four of the most frequently cited problem areas were selected, and relevant materials were distributed. General orientation materials for simulations were distributed also. During the final session, results of the simulations were discussed, as were questions relating to development of new simulations during the next phase of the institute. (2 days)

Mr. Edward Foster previewed for the administrators the outline of the next three weeks for the teams of three who were continuing at the institute. He discussed the production of a complete media unit, and methods for disseminating and demonstrating suitable materials. The role of the State University of New York Instructional Technology course insofar as it related to line personnel in the schools was also described. (1 day)

By the conclusion of phase one, each team had determined some course of appropriate action. At this point, the administrators left, fully aware of the TAIC goals and objectives and their role as facilitators in their respective school systems.

TAIC and BOCES staff and consultants functioned as Resource Personnel for the teams for the remainder of the summer training component of the institute. Some of these people were in constant contact with the participants, while others were called upon when a need arose in developing their in-service or special project.

Edward Cohen and Mary Flynn were available to answer questions about what the research says, how to develop simulations, how to develop a PERT chart, how to list learning sequences, how to prepare appropriate behavioral objectives.

Marie Grieco worked with the teams in defining their role as teacher trainers, librarians, and media specialists, in effecting planned behavior changes in the schools, determining if the media program is effective and developing long-range plans for school media programs.

Lore Howard consulted with participants about designs for media centers, a teacher's relationship to media and library programs and her training needs to function in concert with these programs, and the school librarians' role in the media program.

Claire Rudin helped teams to reorganize their district media programs in light of the human resources and physical structure of their program.

Larry Sribnick and Tim Lau assisted participants in planning and designing media centers in preparing mediated presentations about their programs for their respective boards of education, administration, colleagues, and community, planning and designing mediated materials for classroom use, anticipating hardware and software needs.

Arlene Soifer reviewed all project plans and documents with the participants in anticipation of their being used by school personnel as the initial implementation manual.

Lee Campion discussed with the whole group New York State's ETV Network and the SUNY course in instructional technology. Interested teams had

the opportunity to discuss how their districts could take advantage of the network.

Paul Neff provided participants an opportunity to have "hands on" experience with a video tape recorder and discussed programming plans and utilization, both during their respective in-service courses, as well as planning for their entire district.

Area Chief School Administrators, as well as Dr. Henry Rosenbluth from the Bureau of Indian Affairs, Dr. West from the Office of Education, and a staff member of Media Manpower, Mrs. Jenny Johnson, visited the Institute. Some teams sought their team administrator during the three-week district program design phase when questions arose about school support and policy, as well as financial information for additional materials and supplies.

A field trip was arranged to the New York Institute of Technology. TAIC team members were able to observe both Computer Assisted Instruction (CAI) and Computer Managed Instruction (CMI) and gather information about utilizing New York Institute of Technology's computer resource in their own schools. Several TAIC teams included this activity in their own programs.

The third phase of the program involved continued TAIC staff consulting services with districts while they implemented their programs. In the fall, each TAIC team presented their program and in-service document to their respective Boards of Education and administrations. Since then, programs have been successfully implemented in all but one district.

A full time staff person, Miss Carin Chapman, was assigned to evaluate, coordinate, consult, and support TAIC teams, while they implemented their programs.

District requests for special programs related to the TAIC Institute were prepared in concert with the Nassau Title III Regional Center. Under the

heading of Assistance & Information Institutes (AII) 1, 2, and 3 day programs were given, topics included: individualizing instruction, clinical supervision, efficient staff utilization, PPBS and evaluation, among other topics of interest.

TAIC participants have worked extremely hard and with a tremendous commitment to effect the behavior changes desired within their own districts. All eighteen active teams have held workshop and in-service courses within their districts varying in duration from 4 to 18 weeks involving 465 educators. Due to unforseen internal political problems, the nineteenth district will only implement a modified version of their TAIC project in 1971-72. Other districts which have experienced a limited degree of success, have plans to continue and expand their efforts next year. From this experience 6 districts have budgeted to further develop their media facilities.

A meeting was held on February 6th for area TAIC participants. Thirteen teams sent representatives to describe their accomplishments, activities and future plans (appendix). The change and the impact of technology in their respective school systems generated through TAIC were discussed; and additional materials participants found especially helpful were identified, such as, "Writing and Using Behavioral Objectives," which was later distributed to all TAIC teams.

As either part of a district team or as individuals, one-day district-wide programs have been conducte in not only their own districts but neighboring districts and at professional association meetings on the county and state level. Participants have disseminated information about the change process and instructional media to over 1,400 teachers and administrators.

Evaluation:

An Information Profile was specifically designed to provide the staff and consultants with information about district and participant attitudes, as well as previous experience and knowledge. This instrument was administered during the first week of the summer phase of the Institute to all participants and an abbreviated form of the test was administered to TAIC participants who had been involved for the entire five-week period. (Appendix)

Percentage breakdown of choices in items 1-4 on posttest. Comparative data for pretest included.

	Pretest			Posttest		
	Yes	No.	Undec.	Yes	No.	Undec.
1.	.98	--	.02	1.00	--	--
2.	.13	.59	.28	.32	.44	.24
3.	.09	.77	.14	.05	.82	.13
4.	.80	.05	.15	.84	.01	.15

N.B. Items three and four are negative statements. A "yes" response therefore agrees with negative statement. A "no" response indicate the view that the statement is incorrect.

While the largest number of trainees felt that testing was a good way to evaluate student learning, the percentage of those in agreement fell from 59% to 44% between the pretest and the posttest.

Behavioral Objectives:

On the pretest 55% of the trainees wrote them correctly.

On the posttest 56% wrote them correctly.

N.B. There were 69 responses on pretest and only 25 on the posttest.

The TAIC Information Profile administered July 1970.

Interpretation of responses:

1. The use of behavioral objectives can improve the learning process.

2. Evaluation by testing is a good way to determine whether or not students have learned.

3. The findings of educational research are of use to the classroom teacher.

4. In-service training in the school district can be best accomplished by district staff members trained for the purpose.

5. The trainees valued the following in the order listed:

Posttest		Pretest
1.	Student Involvement	4
2.	Individualized Instruction	3
3.	Instructional Media Centers	1
4.	Inquiry Method	2
5.	Paraprofessionals	5
6.	Independent Team Teaching	9
7.	Learning Spaces	6
8.	PERT	14
9.	Non-grading Systems	7
10.	Minority Studies	8
11.	Project Plan	12
12.	Computer Assisted Instruction	10

Each team's project was read by the BOCES-TAIC staff and a summary sheet prepared (appendix). TAIC teams received individual comments and recommendations on each project and where further assistance was desired. Help was given in preparing mediated materials for both their course and their Board presentations.

A synopsis of each TAIC Project follows:

	BOCES	Carle Place	Elmont	Farmingdale	Freeport	
Problem	Help teachers use more sophisticated media, scientific teaching methods and systems in lesson planning.	Help teachers develop ways of making the instructional process more efficient, effective and manageable.	Develop a multi-media reading program with specifically stated behavioral objectives.	Utilize a greater variety of techniques and media to improve learning opportunities through micro-teaching.	Improve instruction through the use of behavioral objectives, media and more scientific teaching methods.	Improv self-ev
Objectives	Construct behavioral objectives; identify levels of questioning; demonstrate use of available hardware; select appropriate software for given lesson; develop a modular lesson and teach it.	Construct learning environments based on behavioral objectives; develop alternate strategies and techniques utilizing media; select appropriate media and materials based on behavioral objectives; develop source list of print and non-print materials; produce 1 example of mediated materials for specific behavioral objectives.	Write behavioral objectives; utilize multi-media techniques in the classroom; field test, validate and revise learning activities packages (LAPS) in reading in 4 second grades.	Write behavioral objectives; use higher levels of questioning; develop techniques for refocusing and redirecting questions; teach and re-teach micro lessons utilizing above techniques; operate a VTR for micro-teaching and classroom self-analysis.	Write behavioral objectives; use media as a self-evaluation tool; demonstrate appropriate use of hardware and software.	Operat the VT structi analyz tape ei or with
Multiplier	83 participants from 12 BOCES special, vocational and occupational schools. Range from aides to administrators.	Two groups of 18 people (36 participants).	Four groups of 5 people working on LAPS (20). All school conference day for 83 teachers to discuss TAIC activities.	4 groups of 6 teachers for microteaching (24); 250 teachers at building level conference days; 35 administrators at conference for district wide administrative personnel.	Plan to implement program next year.	20 part high.
Program	Inservice, directly related to summer topics including the development of individual or group projects (Fall). Team teaching and project implimentation with TAIC team consultants (Spring). Special work utilizing a VTR to develop student self-image and train parents to work with TMR's.	In-service, directly related to summer topics. (Fall). In-service on individualized instruction (Spring). Plans to implement open space, non-graded middle school Fall '71.	Individualizing instruction. Continuation of validation process as well as influencing and helping others in writing behavioral objectives and developing LAPS.	Microteaching (4 schools); system wide dissemination of TAIC objectives and activities; development of student learning center.	In-service, directly related to summer topics.	Self-ev a videc modifi superv

Elmont	Farmingdale	Freeport	Glen Cove	Island Trees	Jericho
a multi-media program with lly stated be- objectives.	Utilize a greater variety of techniques and media to improve learning opportunities through micro-teaching.	Improve instruction through the use of behavioral objectives, media and more scientific teaching methods.	Improve teaching through self-evaluation.	Create greater student interest and involvement through improved teaching methods.	Develop a more learne centered instructional environment on the se ondary level.
havioral objec- llize multi- chniques in the m; field test, and revise activities pack- APS) in reading nd grades.	Write behavioral objectives; use higher levels of questioning; develop techniques for refocusing and redirecting questions; teach and reteach micro lessons utilizing above techniques; operate a VTR for microteaching and classroom self-analysis.	Write behavioral objectives; use media as a self-evaluation tool; demonstrate appropriate use of hardware and software.	Operate a 1/2" VTR; use the VTR as part of instructional practice; analyze and evaluate tape either individually or with colleague.	Write behavioral objectives in the cognitive, affective and psychomotor domain; utilize simulation, role playing and gaming techniques in the classroom; utilize a variety of multimedia techniques to meet specific objectives; self-critique teaching using a videotape recorder.	Write behavioral objec tives; select appropria media; utilize a VTR fo teacher self evaluation and student analysis; utilize higher levels of questioning.
ups of 5 people on LAPS (20). ol conference 3 teachers to TAIC activities.	4 groups of 6 teachers for microteaching (24); 250 teachers at building level conference days; 35 administrators at conference for district wide administrative personnel.	Plan to implement program next year.	20 participants in junior high.	18 participants in in-service course; 63 participants Nassau Science Supervisors meeting; 78 at neighboring school district's conference day; 27 at in-service presentation in neighboring district; 85 at New York Science Supervisors meeting; 307 at faculty meetings; superintendents conference day series planned by TAIC for 1971-72.	25 participants.
lizing instruc- ntinuation of n process as nfluencing and thers in writing l objectives loping LAPS.	Microteaching (4 schools); system wide dissemination of TAIC objectives and activities; development of student learning center.	In-service, directly related to summer topics.	Self-evaluation utilizing a videotape recorder-modification of clinical supervision.	In-service directly related to summer topics. Will be repeated next year by TAIC team members and their trainees.	In-service. Plans to expand program next year to include more microteaching and clinical supervision.

ort	Glen Cove	Island Trees	Jericho	Merrick	New Hyde Park
ruction se of behav- es, media entific hods.	Improve teaching through self-evaluation.	Create greater student interest and involvement through improved teaching methods.	Develop a more learner centered instructional environment on the secondary level.	Develop an individualized math program.	Guide teachers in the utilization of multimedia techniques and materials.
oral objec- dia as a n tool; appropriate re and	Operate a 1/2" VTR; use the VTR as part of instructional practice; analyze and evaluate tape either individually or with colleague.	Write behavioral objectives in the cognitive, affective and psychomotor domain; utilize simulation, role playing and gaming techniques in the classroom; utilize a variety of multimedia techniques to meet specific objectives; self-critique teaching using a videotape recorder.	Write behavioral objectives; select appropriate media; utilize a VTR for teacher self evaluation and student analysis; utilize higher levels of questioning.	Implement individualized math program at Lakeside School.	Write behavioral objectives; and utilize multimedia materials in the classroom to meet objectives.
ment pro- r.	20 participants in junior high.	18 participants in in-service course; 63 participants Nassau Science Supervisors meeting; 78 at neighboring school district's conference day; 27 at in-service presentation in neighboring district; 85 at New York Science Supervisors meeting; 307 at faculty meetings; superintendents conference day series planned by TAIC for 1971-72.	25 participants.	6 additional teachers joined team. Utilizing multimedia commercial materials and developing other mediated materials on their own.	80 teachers in district-wide program.
irectly re- mer topics.	Self-evaluation utilizing a videotape recorder-modification of clinical supervision.	In-service directly related to summer topics. Will be repeated next year by TAIC team members and their trainees.	In-service. Plans to expand program next year to include more microteaching and clinical supervision.	Individualized instruction. Extensive work on change and innovation, technology, and instructional development taking place throughout district for past 2 years.	In-service directly related to summer topics. District multimedia learning center being developed for Fall 71.

	North Merrick	Seaford	Syosset	Valley Stream	Brooklyn Diocese	Bure
Problem	Provide each child in a 5th grade classroom with an individualized learning experience.	Help teachers to use media to achieve behavioral goals.	Introduce teachers to techniques for improving and individualizing instruction by providing for a more sequential developmental curriculum.	Help teachers to identify new trends in education and inform them of techniques and strategies they may try in their classroom.	Change from a lecture-text oriented classroom situation to large/small and individual instruction patterns.	Acc diff curr
Objectives	Write specific behavioral objectives for and with each child; develop mediated materials and learning activities packages for and with each child.	Demonstrate techniques for integrating media into curriculum to achieve behavioral objectives; write behavioral objectives for classroom use; use media resources in teaching.	Write behavioral objectives for classroom use; use role playing, simulation and gaming techniques; use higher levels of questioning.	Write behavioral objectives; demonstrate ability to use media available in district; apply principles of clinical supervision for teacher self-analysis.	Write behavioral objectives; systematically use available hard and software; plan instructional events.	Indiv gran prog
Multiplier	TAIC team has field tested and validated materials in own classroom. Their success has led to other teachers venturing to experiment in the same manner.	28 participants. 15 administrators to review evaluation strategies.	19 participants.	30 participants in-service; 480 teachers attended all 4 superintendents conference days devoted to TAIC program.	14 participants (teachers).	Non curr
Program	Individualized instruction. TAIC team as consultants to other teachers in the building. Plans for district wide in-service program directly related to TAIC beginning Fall '71.	In-service, directly related to summer topics. Extensive work with mediated materials in language arts area.	In-service, directly related to summer topics.	In-service, directly related to summer topics.	In-service directly related to summer topics.	10th gran

Syosset	Valley Stream	Brooklyn Diocese	Bureau of Indian Affairs Chemawa	Bureau of Indian Affairs Fort Wingate	Diocese of Rockville Cent
Introduce teachers to techniques for improving and individualizing instruction by providing for a more sequential developmental curriculum.	Help teachers to identify new trends in education and inform them of techniques and strategies they may try in their classroom.	Change from a lecture-text oriented classroom situation to large/small and individual instruction patterns.	Account for individual differences in the math curriculum.	Train a teacher in the use of media who can serve as a trainer.	Provide faculty w understanding of media and metho may change instr
Write behavioral objectives for classroom use; use role playing, simulation and gaming techniques; use higher levels of questioning.	Write behavioral objectives; demonstrate ability to use media available in district; apply principles of clinical supervision for teacher self-analysis.	Write behavioral objectives; systematically use available hard and software; plan instructional events.	Individualize Math program on a continuous progress base.	Write behavioral objectives; prepare 2 videotapes for self-analysis.	Write behavioral tives; use higher of questioning; p overhead transpa operate equipme able in schools.
19 participants.	30 participants in-service; 480 teachers attended all 4 superintendents conference days devoted to TAIC program.	14 participants (teachers).	None. Systematic curricular design.	1 trainee (teacher).	35 participants.
n-service, directly related to summer topics.	In-service, directly related to summer topics.	In-service directly related to summer topics.	10th grade Math program initially.	Directly related media utilization.	In-service, dire lated to summer

ocese	Bureau of Indian Affairs Chemawa	Bureau of Indian Affairs Fort Wingate	Diocese of Rockville Centre	Hebrew Day Schools	Puerto Rico
lecture-lassroom ge/small instruction	Account for individual differences in the math curriculum.	Train a teacher in the use of media who can serve as a trainer.	Provide faculty with an understanding of newer media and methods that may change instruction.	Provide for varying abilities in a self-contained 7th grade classroom by developing a student tutorial system.	Use behavioral objectives and media in the 4th grade social studies curriculum to improve the teaching learning process.
al objectically use and soft-ructional	Individualize Math program on a continuous progress base.	Write behavioral objectives; prepare 2 videotapes for self-analysis.	Write behavioral objectives; use higher levels of questioning; produce overhead transparencies; operate equipment available in schools.	Prepare behavioral objectives and materials for each student and buddy; provide time and establish learning environment for tutorial situation.	Write behavioral objectives; demonstrate proper use of equipment available.
	None. Systematic curricular design.	1 trainee (teacher).	35 participants.	10 teachers, students and parents.	12 elementary (teachers).
ectly re-r topics.	10th grade Math program initially.	Directly related media utilization.	In-service, directly related to summer topics.	Student tutorial as a move toward individualized instruction.	In-service, directly related to summer topics.

14 TAIC teams have informed us of their plans to continue work next year through in-service courses, professional meetings, classroom activities, and in instructional material centers.

Meeting objectives: (pp. 2-3)

1. 17 system wide teams were trained along with 2 representatives from the Bureau of Indian Affairs. As a result of the Institute, programs have been implemented which have disseminated information to over 1,400 people and have shown positive results on pre and post tests developed by each team. 10 programs have multiplied 2 or 3 times since their inception with plans for continuing in 1971-72 school year.
2. Classroom use of media has been increased as have school and district media resources been expanded. 4 districts are developing new learning resource centers, while 6 others are acquiring additional materials, space and facilities.
3. The Team Approach Project (TAP - EDPA Part D BOCES MEDIA SPECIALIST PROGRAM '69-'70) effectuated the planned behavior changes anticipated. Elements of this program were incorporated into the TAIC project; however, limited time prevented an in-depth study of paraprofessional training. Verbal communications with TAP teams, as well as area surveys have shown growth in paraprofessional training and use in our area. Only one TAIC in-service course provided special training for paraprofessionals.

Phase IA OBJECTIVES: (pp. 3-4)

1. Each team submitted a list describing their system wide media program prior to the first day's activities.

2. Teams were expanded from three to four members; as it became obvious that to meet our objectives, teacher participation and involvement was essential.
3. Subjective school system profiles were gathered from each team's administrator. Objective data was gathered from the BOCES school and community resource index through the computer services division.
4. Bibliography is located in appendix.

Phase IIA (p. 4)

1 and 4 dealing directly with simulations, and objective 2 dealing with a community profile, were incorporated into the simulation activities which were an integral part of the institute.

3. A curriculum outline training manual and PERT chart was prepared by each team.
5. Each TAIC team document stated specific behavioral objectives designed to effectuate planned behavior changes in their system.
6. Materials and resources were gathered by team members. Some print materials were distributed to each team, and others were available for purchase. Software materials could be borrowed from the Institute for training in district (appendix).
7. Pre and post test materials were prepared by TAIC teams to be used in concert with their training programs. All commercially prepared materials to be used during the in-service were evaluated in relationship to each team's objectives. Their own materials were designed in light of their district program.
8. The librarian, media specialist and teacher brought to the institute extensive information about media problems in their respective districts. During the Institute, they analyzed their perceptions in an attempt to identify and specify their problems as

opposed to their symptoms.

9. Teams developed their own simulation exercises (appendix).

10. Each TAIC team prepared a TAIC document (2 from Bureau of Indian Affairs) including all elements mentioned above. This was reviewed by the TAIC staff and then submitted to each TAIC team's respective board and administration. In some instances, financial considerations, caused some programs to be modified; however, TAIC provided for the loan of a VTR through the BOCES television facilities, when necessary. This was the major expense mentioned in nine projects; however, where a VTR was not acquired during the 1970-71 school year, it has been added to the proposed budgets for 1971-72.
All TAIC in-service courses carried on in Phase 2B provided for 1-3 hours of increment in-service credit in their respective districts.

Phase IIB (p. 5)

1. Participants shared the responsibility of gathering materials and developing syllabi for their participants, as well as previewing mediated materials they might use.
2. Each team chose materials according to their objectives and cross-fertilized other teams by demonstrations.
3. Program sequence and alternatives were provided for in the PERT chart design.
4. Field testing of prototypes, as well as alternative strategies were tried among the differing teams during the last three weeks of the institute.

Long Range Objectives: (p. 5)

It is anticipated that in meeting our short-term objectives, we would, in turn, meet our long-term objectives. Evidence to date has shown the following

In regard to our long-range objectives.

1. TAIC teams have effectuated planned behavioral changes. In so doing, administrators on the district and building level are encouraging greater use of media, more workshops, and in several instances, teacher implementation of experimental projects, such as:

    1.1 Use of the VTR to improve student self-image and provide training for parents in the area of special education.

    1.2 Use of the VTR to improve student self-image and verbal communication in the elementary school, with data collection and analysis in regard to student growth occuring at timed intervals.

    1.3 Individualized instruction programs on a grade level utilizing teacher and student prepared materials, as well as commercially produced materials.

    1.4 Experimentation with open-space, non-graded learning environments for middle school students.

2. In areas mentioned in 1.3 and 1.4 above, the importance of print and non-print material took on greater importance than previously. TAIC trained teams and their trainees are integrally involved in helping teaching teams in the systematic design of instruction and learning activities.

Thus, in looking at long range objective 2, we see a shifting pattern which provides greater involvement of people and things in developing and effecting the students learning process. The librarian, the educational communications person and the curriculum specialist are not functioning in isolation.

3. The fact that TAIC teams and their trainees are continuing to conduct in-service courses, and workshops, as well as being directly involved in planning professional days for 1971-72 is an indicator of the effectiveness of training teams.
4. Subject areas and content materials are being reviewed by teachers and resource personnel which may develop a more integrated curriculum especially as the school systems are moving toward individualizing instruction. Similarly the in-service courses have offered teachers a unique opportunity to share both their previous experiences and their new skills.

The plan and the objectives identified both end products and the procedures necessary to get there.

Procedure 1 (pp. 5-6)

TAIC teams in conducting their courses and training additional personnel have become more involved and interested in in-service education and both their own and their trainees growth. Along with their trainees, further programs are being offered in most districts; the others have chosen to work in small groups to change instructional patterns. Team B-1 has continued its role with support from B-2. Multimedia teaching units have been prepared by both groups.

Procedure 2

Training of auxiliary personnel, as mentioned above, was infeasible due to existing time constraints. Also, districts had, in several instances, reduced their budgets and support personnel. Therefore, paraprofessionals were considered in all phases of the program, although no formal training effort was made to prepare TAIC teams to do specialized training with them. Where TAP personnel were available in the district paraprofessionals were considered. TAP has continued to train and utilize paraprofessionals in

expanding programs independent of BOCES support, thus the 1969 EPDA Part D Media Specialist Project has continued to multiply in 1970-71.

Procedure 3

The hoped for impact of the project has trained teams B-1 and B-2; there is a cadre of professionals many times multiplied from a year ago - 465 professionals have received retraining in media technology, individualized instruction and systems. Another group of over 1,400 have had contact with team B-1 and, in some instances, are seeking further training.

Procedure 4

The multiplier effect has been achieved, 465 people trained by B-1 in workshops, institutes and in-service work, over 1,400 informed of TAIC goals and objectives. Both the director and field evaluation specialist have conducted the troubleshooting meetings promised. Site visits to the teams in Puerto Rico, New Mexico and Oregon have been postponed; however, the director plans to do follow-up work with these teams during the 1971-72 school year.

THE ADMINISTRATION OF INSTRUCTIONAL CHANGE

INSTITUTE CERTIFICATE

to

TAIC

_____

Has completed _ hours as a Trainer
in implementing the process of educational
change for a school district

BOCES, Nassau

July, 1970

_____
Director

_____
District Superintendent

The Education Professions Development Act